

11. (new) The method of claim 10, wherein the mutation in the globin-like protein is at an amino acid position in either the alpha or beta subunit of hemoglobin selected from the group consisting of B10, CD3, E11, and G8.

12. (new) The method of claim 11, wherein the mutation in the globin-like protein is a mutation in either the alpha or beta subunit of hemoglobin selected from the group consisting of B10→Phe, B10→Val, B10→Ile, CD3→His, E11→Leu, E11→Trp, E11→Phe, and G8→Ile.

13. (new) The method of claim 12, wherein the mutation is selected from the group consisting of:

- (a) Leu28(B10)→Val in beta globin;
- (b) Leu28(B10)→Ile in beta globin;
- (c) Ser44(CD3)→His in beta globin;
- (d) Leu29(B10)→Phe in alpha globin;
- (e) Val67(E11)→Trp in beta globin;
- (f) Val62(E11)→Phe in alpha globin;
- (g) Val67(E11)→Phe in beta globin;
- (h) Leu106(G8)→Ile in beta globin; and
- (i) Val62(E11)→Leu in alpha globin.

14. (once amended) The method of claim 10, wherein the mutation in the globin-like protein is at an amino acid position in the alpha or beta subunit selected from the group consisting of E7 and B13.

15. (once amended) The method of claim 14, wherein the mutation in the alpha or beta globin-like protein is selected from the group consisting of E7→Leu, E7→Phe, E7→Met, E7→Trp, B13→Leu, B13→Phe, B13→Met, and B13→Trp.